

CLAIMS

WHAT IS CLAIMED IS:

1. An implant for insertion between vertebrae of a spinal column comprising:

a) at least two implant parts comprising:

i) a first implant part; and

ii) a second implant part wherein said first and said second implant parts are axially adjustable relative to each other to change a length of the implant along a longitudinal axis of the implant; and

b) a joining plate that can be releasably connected with a free end of at least one of said at least two implant parts in a substantially perpendicular alignment relative to said longitudinal axis of the implant, wherein the implant can be inserted between vertebrae of a spinal column as a substitute for disks, vertebrae or parts of vertebrae removed from a spinal column.

2. The implant as in claim 1, wherein said joining plate has a thickness that corresponds to between 2% and 30% of a height of at least one of said at least two implant parts.

3. The implant as in claim 1, wherein said joining plate projects beyond an outside contour of said implant.

4. The implant as in claim 1, further comprising a means for releasable attachment of said joining plate comprising an opening formed in said joining plate.

5. The implant as in claim 4, wherein a shape of said opening is adapted to an outside contour of said implant.

6. The implant as in claim 4, wherein said opening is positioned to be in a center of gravity of said joining plate.

7. The implant as in claim 4, wherein said opening is configured to lie outside of a center of gravity of said joining plate.

8. The implant as in claim 1, wherein a surface of said joining plate that faces a vertebrae is shaped as a convex dome.

9. The implant as in claim 1, wherein said joining plate has a means for attachment in duplicate and is attached to at least one of said at least two implant parts.

10. The implant as in claim 9, further comprising a catch seat wherein said means for attachment is formed by a plug-in connection formed between said joining plate and at least one of said at least two implant parts.

11. The implant as in claim 10, wherein said means for attachment is formed by a bayonet closure.

12. The implant as in claim 9, wherein said means for attachment comprises a groove formed in a free end of said at least one of said at least two implant part; and further comprising a spring mounted in a groove in an opening formed in said joining plate.

13. The implant as in claim 12, further comprising a

plurality of mandrels or cutting blades coupled to a side of said joining plate that faces a vertebra.

14. The implant as in claim 3, wherein said joining plate is formed as a polygon.

15. The implant as in claim 3, wherein said joining plate is configured in a rounded manner.

16. The implant as in claim 3, wherein said joining plate is configured in a star-shaped manner.

17. The implant as in claim 3, wherein said joining plate has a passage opening.

18. The implant as in claim 17, wherein said joining plate has a plurality of passage openings.

19. The implant as in claim 18, wherein at least one of said plurality of passage openings extends to an outer edge of said joining plate.

20. The implant as in claim 18, wherein said joining

plate has a plurality of plate ridges disposed around said plurality of passage openings on said joining plate.

21. The implant as in claim 20, wherein said plurality of plate ridges on said joining plate are coupled to each other at a free end of said plurality of plate ridges to form an edge of said joining plate.

22. The implant as in claim 21, further comprising a rotatable threaded ring coupled to said second implant part, and wherein said first implant part has threads which engage with a set of threads in said rotatable threaded ring, wherein said rotatable threaded ring has a bevel wheel gearing.

23. The implant as in claim 1, wherein said joining plate has a side that faces the vertebrae and is orientated at an incline to said longitudinal axis.

24. The implant as in claim 1, wherein said joining plate has a side that faces said at least two implant parts and is orientated at an incline to a longitudinal axis.

25. The implant as in claim 24, wherein an angle of said incline of said joining plate is between 3 degrees and 45 degrees.

26. The implant as in claim 23, wherein said joining plate has a rotational position that can be fixed in place about a longitudinal axis relative to said at least two implant parts.

27. The implant as in claim 26, further comprising a plurality of catch seats formed between said joining plate and said at least two implant parts in a circumferential direction, in step widths from between 10 degrees to 45 degrees.